

AR5 Analog Rocker



The AR5 Analog Rocker from DeltaTech Controls has been developed to provide the reliability required in demanding environments - such as dashboards or armrest controls - for heavy duty industrial and off-road applications.

The unique design makes the rocker module an ideal proportional function solution for off-road machinery for cost-effective custom designs. The AR5 has been designed to simplify the customization of fingertip rockers in an off-road vehicle application.



AR5 with standard lever

Main Features

- Contactless sensing – Hall effect
- Rocker life > 2 million cycles
- Optional:
 - detent, life > 200K cycles
 - latching, life > 100K cycles
- Single sensor – optional second sensor for redundancy
- Integrated temperature compensation
- Short circuit protection
- Ideal solution for fingertip rocker designs
- Potted electronics

Custom modifications

- Deflection angle
- Detent / Latching detent
- Lever design allows for usage of longer levers
- Connector / Harness

Electrical Data

Supply Ratings	Voltage range DC current	9V ... 30V or 5.0 V \pm 5% 50 mA at 24V
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Voltage Output	Output 1 Output 2*	0.5V ... 4.5V at 5Vcc 4.5V ... 0.5V at 5Vcc Output proportional to Vcc
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Pull-down resistor	Recommendation	4.7k Ω
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Output current		1 mA max.
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Other electrical Characteristics	EMI	> 100 V/m
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Mechanical Data

Life:	- rocker	> 10 million cycles (equivalent > 20 million movements)
	- detent	> 200k cycles
	- latching	> 100k cycles

Operating temperature		- 40°C to 85°C
- Storage		- 40°C to 85°C
- Working		

Operating force		4-6 N
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Vertical load maximum		30 N
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Protection Level		IP 67
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Rocker deflection angle		\pm 40° max.
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* for redundant version

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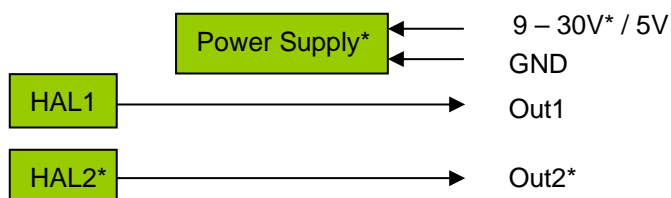
Order Code

Ordering code		1	2	3	4	5	6	7	8	9	10
	Example	AR5	S	40/40	xN	D26/26	L32/32	1	V	2	00
1	Type	AR5 = analog rocker 5									
2	Lever	C = customized lever S = standard lever									
3	Deflection Angle	40/40 = ± 40° x/x = customized ± 0-40° (left/right)									
4	Operation Force	xN = operation force depends on lever									
5	Detent*	-/- = no detent D26/26 = standard ± 26° detent Dx/x = customized ± x° detent									
6	Latching *	-/- = no latching L32/32 = standard ± 32° latching Lx/x = customized ± x° latching									
7	Electrical supply	0 = voltage 9 ... 30 V 1 = 5 V ± 5%									
8	Output	V = voltage									
9	Sensors	1 = 1 sensor 2 = 2 sensors (for redundancy)									
10	Output Voltage Code **	00 = output 1 / 0.5V ... 4.5V; 1mA output 2 / 4.5V ... 0.5V; 1mA 02 = output 1 / 0.5V ... 4.5V; 1mA 03 = output 1 / 4.5V ... 0.5V; 1mA									

* detent and latching positions must be taught-in in application

** ratiometric to 5V supply

Block Schematic



* Optional

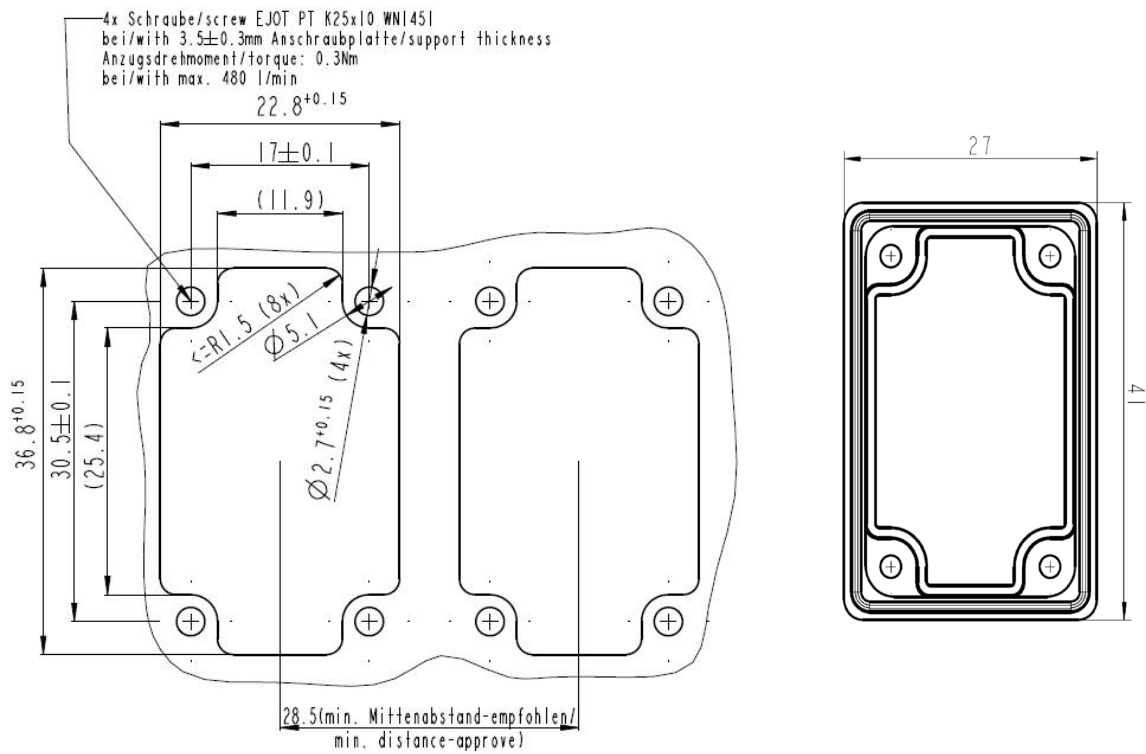
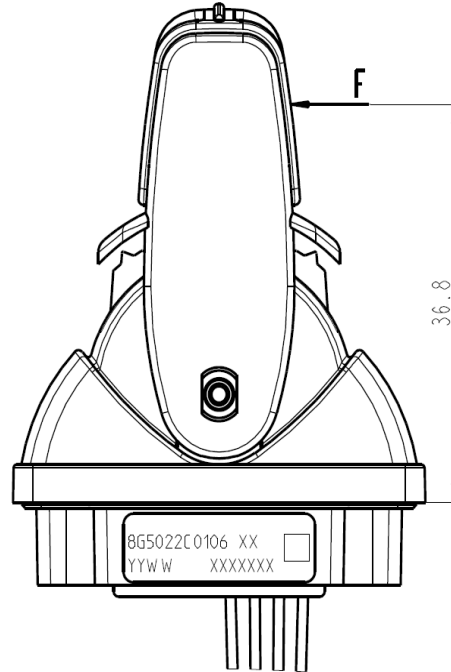
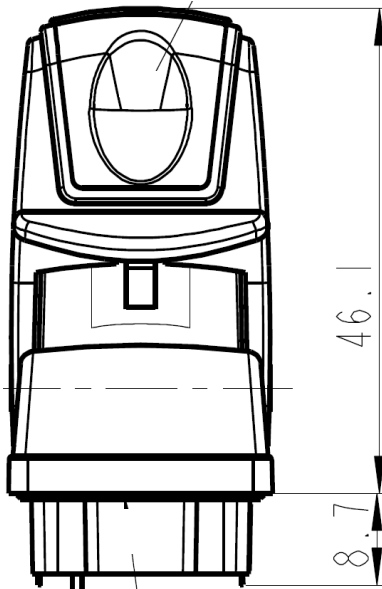
Pin Assignment

PIN	Signal	Function 9 – 30V	Function 5V
1	Ub *	Supply Voltage	Not connected
2	GND	Reference Ground	Reference Ground
3	Vcc *	Not connected	Supply Voltage
4	Out1	Output Signal	Output Signal
5	Out2*	Optional redundant Output Signal	Optional redundant Output Signal

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Install dimensions



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With sales offices and manufacturing facilities located worldwide, please visit our website at www.deltatechcontrols.com for a complete listing and to find the office nearest to you.

Germany

Headquarter

Freiheit 8
13597 Berlin
Germany

phone: + 49 30 43 999 0

fax: + 49 30 43 999 203

Mail: sales.dtc.europe@coactive-tech.com

France

2 Boulevard Michaël Faraday
Arlington Square, Bâtiment B
Serris – F 77716 Marne-La Vallée Cedex 4
France

phone: + 33 160 24 51 51

fax: + 33 3 84 69 08 97

Mail: sales.dtc.europe@coactive-tech.com

USA

5288 Valley Industrial Blvd. S
Shakopee, MN 55379
USA

phone: + 1 952 403 7400

fax: + 1 952 233 9707

Mail: sales.dtc.americas@coactive-tech.com

Japan

9F, Ariake Frontier Building B
3-1-25 Ariake, Koto-ku, Tokyo 135-0063
Japan

phone: + 81 3 5530 9365

fax: + 81 3 5530 8737

Mail: sales.dtc.asia@coactive-tech.com

China

3rd F. North Building
No. 239 Gangao Rd.
W.G.Q.FTZ. Pudong
Shanghai. 200131
China

phone: + 86 13810247876

fax: + 86 21 3393 8281

Mail: sales.dtc.asia@coactive-tech.com

Korea

15th Fl, Kyobo Building,
1 Jongno, Jongno-Gu,
Seoul,
Korea. 110-714

phone: + 82-2-2010-8903

Mail: sales.dtc.asia@coactive-tech.com

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